R M User

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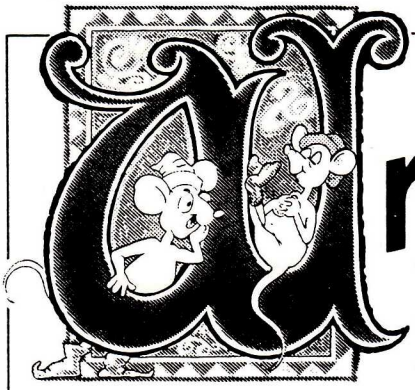
The magazine of the RM User Group



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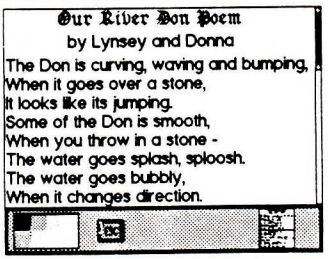
Our River Don Poem
by Lynsey and Donna
The Don is curving, waving and bumping,
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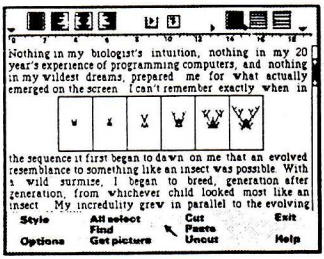
Nothing in my biologist's intuition, nothing in my 20 year's experience of programming computers, and nothing in my wildest dreams, prepared me for what actually emerged on the screen. I can't remember exactly when in
the sequence it first began to dawn on me that an evolved resemblance to something like an insect was possible. With a wild surmise, I began to breed, generation after generation, from whichever child looked most like an insect. My incredulity grew in parallel to the evolving
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HELP-LINE

The User Group contains a great body of expertise amongst its members and the help-line exists to act as a channel for spreading knowledge and especially answers to your problems.

Remember, your problems are also our problems!

If you are in difficulty, please feel free to **ring anybody on the Committee** (see page 38 for numbers and note that Helen and John Williams have an answering machine. If you're not sure who to phone then leave a message there and they will redirect it). We may not, individually, know the answers, but we hope that we may know someone who does.

You may also telephone Tim Philips on 0284 706623, especially regarding 380Z or PC186 problems and Keith Whiddon on 0403 217339, particularly about Nimbus systems. Both numbers are home numbers. My thanks to Tim and Keith for volunteering.

Remember, the Group is on **TELECOM GOLD 83:JNL585**
Do feel free to write either to the Editor or the Secretary. This may be especially useful if the problem is complicated and non-urgent.

Advertising in the Magazine

Full- and half-page advertisements can be placed in the Magazine and details can be obtained from the Advertising Manager (address on Committee Page at back). We also take classified ads and members may place free ads for surplus kit in Micro-Mart, provided a valid membership number is quoted with the ad.

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These rates assume black-on-white, camera-ready copy. Please avoid dot-matrix output. Typesetting is charged at cost and is additional to the above rates. Classified ads **must** be pre-paid, cheques for £5 payable to RM User Group.

The deadlines for the next two issues are: **November 26th 1990 and February 4th 1991**

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Editorial and News

Good news for those of us who still work mainly with PC186s (and that includes me; this is being written on a 186) must be feeling rather left out in all the fuss being made about Windows 3. RM promised that Windows 3 would be available for all their machines and they are now saying that the version for PC186 will be available early in 1991. I've seen a pre-release version which seems nearly finished. Obviously it doesn't have all the colours or the resolution of a VGA version but it works and seems to leave a good amount of memory free even on a network. More about it when it's released.

At the AGM at ILECC Colin Watkins said that RM were trying very hard to improve delivery times. It looks as if they've succeded in getting reasonable times at long last. Over the past months my school ordered a VX server and some PC286 stations. In both cases the order spent less than 2 weeks with RM which seems reasonable.

On the subject of the AGM it is likely that we will be holding it in London again in 1991. It's been our experience that more people can get to a London meeting than one held anywhere else but we are aware that this does leave some people feeling left out. If you can't make it to London then why not organise a local meeting? It may be possible for the User Group server to come along so that you can see a very large quantity of software. Contact Graham Townsend for more on this.

Many of you will have seen a program called Question Mark; it was reviewed in RM User some time ago. It now has an accompanying program called the Graphics Companion. For those of you who don't know the program it allows you to set up very flexible tests which can be multi choice or answered in plain (although limited) English. Graphics Companion allows pictures to be added to the tests. The program can be used on a PC 186 in IBM mode or any X or M series machine, on which the graphics are obviously much better. For further information contact John Kleeman at Question Mark Computing, 12 Heath Villas, Vale of Health, London NW3 1AW. Telephone 071 794 9411.

Net 3 has now been available for some time and seems to be working well. Printer management is much improved. It is now possible to move files from one printer to another after they have been spooled by the station but before the server has printed them. This has proved useful when someone has accidentally sent a long file formatted for an Epson LQ printer to the Epson EX; a quick PRINT MOVE and all is well.

It is also possible to send a standard string to each printer before a job. This can be used to make sure that it is reset before the next job prints.

Unfortunately there is still only one real printer queue. My school has two computer rooms with the server in between them and a printer in each room. If a station in each room tries to print at the same time then the first person to press CTRL ALT PRTSC gets their work completely printed before the second printer starts. This doesn't matter when people are doing (say) single pages of text but is somewhat offputting when it's a 10 page PageMaker document which will take 20 minutes to print! Chain 64 servers allow several printers to work simultaneously, feeding data to each as necessary. RM have just announced the Net Remote Station Printing Option Pack (026-207, £99 to schools £149 generally and available "now") which allows you to set up any network station (even a TN) as a print despooler. This means that you can plug many printers into this machine and all of them will print as fast as possible. This is welcome; in my school there would be a use for a networked printer which is remote from the server; but still does not address the problem (except at a high cost; the software is reasonably priced but it also needs a computer and I don't have even a spare TN)

Surely with the power of a VX to play with (or even an AX) it should be possible to spare a little time to send data to any printers that are plugged in?

There are some minor but niggly bugs with Net 3. One which shows itself in many different ways is the shortage of environment space. (This is the block of memory where all the data which appears when you type SET is stored). You know you've got this problem if, when you try to load some software, you get a message saying *Out of environment space.* It will also show if you try to use very long user identities (I have no problems with names up to 8 letters long but 15 definitely causes problems). The problem shows when a user tries to load software from a their menu and gets the message saying that the specified program can't be run. It seems to happen only with programs that load from batch files and (for me at least) only on PC186s, not on PC286s. A solution is to run (X)NETMAN and make the following changes to the logon options for the user, group or public as necessary.
Change the command processor to
?:\COMMAND.COM ?:\START.BAT
(START.BAT can be any batch file; it should not be the same as an existing program).
Create batch files called START.BAT on drives P: and Q: (if you are at a station you will be working in M:\PUBLIC and M;\XPUBLIC)

```
REM P:\START.BAT
SET ENVSPC=
SET ENVSPC2=
P:\MENU P:\MENUONE
```

```
REM Q:\START.BAT
SET ENVSPC=
SET ENVSPC2=
PAUSE
Q:\MENU Q:\MENUONE
```

The menu files don't have to be MENUONE; you can use whatever you want.
ENVSPC and ENVSPC2 are dummy variables created when you log on; setting them to be empty like this frees up some environment space. Unfortunately you are now running COMMAND.COM to load the batch file which loads the menu which loads COMMAND.COM to load the batch file which runs Word (or whatever). This means that less memory is available than usual. I understand that RM are working on a full solution; in the meantime if you can't use shorter usernames then this is the best answer for now.

I've had a letter from a user about problems running NETDSK on exit from Art + Time. I suspect that this is the same problem.

On the subject of PageMaker, version 3.01 (needed to run with Windows 3 in standard mode) comes with screen font files for Zapf Chancery and Zapf Dingbats. Installing them as fonts using Control Panel gives both fonts shown properly on screen. Wonderful!

I've been looking at a Network Management System from Richard Naylor. Netman is fine when you are using the standard network but when you start to add a large number of users it becomes unwieldy and rather slow. NMS is still menu driven but is substantially faster to use. It also prints better reports; one of my pet hates concerning NETMAN is having to handcopy ids and passwords for each user; with 800 users this is no joke! NMS allows sensible labels to be printed. As with many utilities it is not very exciting but when you've got it you wonder how you managed without it! Details from Dr. R.A. Naylor, Methodist College, 1 Malone Road, Belfast. BT9 6BY Tel: 0232 681853/669558

CD ROM is a technology whose time seems to have arrived. Whittle Systems and Cumana are advertising CD products in this magazine and there is an increasing number of CD ROMs available at reasonable price. It's now possible to make CDs for relatively low prices and databases like NERIS seem to make much more sense if available all the time rather than via the overpriced and unreliable BT system. With RM's help my school is looking at networked CD ROM; watch this space for information about how we get on.

Mapping IT across the National Curriculum

Bev Wight
IT Co-ordinator, Oval TVEI

The 1988 Education Act laid out the framework for the National Curriculum to include 3 core subjects - English, Maths and Science and 7 foundation subjects of which Technology was to be one. All core and foundation subjects were expected to include references within their own reports to the use of IT and to assess IT capability in respect of their own subject; in addition Technology was to include a general assessment of IT. The result, as we all know, is AT5 Information Technology Capability.

For the class teacher in a school, often having limited access to National Curriculum materials, there is a dilemma. She can carry on down her own wind-tunnel, using only her own report (if it has yet been published) and ignoring the struggles of her colleagues in parallel wind-tunnels. Alternatively teachers can begin to try and work together with colleagues from other departments, faculties or year groups to map the programmes of study for the National Curriculum onto the school curriculum, identify gaps and overlaps and then decide what to do with the time liberated from pointless duplication of topic and subject matter. The notion of one subject specialist delivering another subject's content is not a new one. Humanities departments and lower school Integrated Studies teams have been doing it for at least 20 years. The change we have for 1990 is that the content of each curriculum area has been defined by statute. If a class of 11 year olds got so excited by the Romans that they missed out on the Saxons (all those Ethels) that was OK; if the stick insects died of a surfeit of blackberry leaves, we could always study ants or worms; now students will be tested on the knowledge, skills and understanding contained in each curriculum document and students, teachers, schools and education authorities will be judged (and perhaps found wanting) by the results of these tests.

Most teachers want to work with other colleagues to reduce the duplication and to ensure that while their Statutory Obligations are met, there is still time for local initiative and the locally-designed curriculum that helps make every school a unique and special place to work.

With IT this problem of duplication is even more apparent. Whilst AT5 Technology details level by level the Statements of Attainment to be gained by students, within the core areas and other foundation subjects may be found SoAs that are similar or identical. Not all of these SoAs cover each area of home, school, community, business and industry.

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Mapping of student attainment across 5 strands, 10 levels and 10 subjects, plus RE is not an easy task and may be made more difficult by ignorance of the detail or indeed the meaning of SoAs outside one's own specialism. The ability to use, for example, a word processor to copy out work written in several subject areas does not mean a student is more capable than one who drafts and re-drafts a piece of writing and then chooses fonts and borders to present their work in just one subject.

How can IT teachers, with full time-tables and all the problems of providing technical support and INSET to their colleagues begin to make a start on mapping and then assessing a student's experience of IT across a school curriculum? There is a need to identify the individual Statements of Attainment in IT and then to identify from their colleagues schemes of work and Statutory Orders where these match. Each level of IT attainment will need to be matched against other subject areas and then the whole process can be overlaid to identify where, for example, no other department or subject area is covering an SoA or where the same SoA is being covered in a similar way, to a similar depth in 2 or more subject areas.

Heads of IT and IT Co-ordinators will need this information for two reasons. Firstly to identify gaps in provision and to make arrangements for them to be filled, either by getting another subject to cover them or by providing them, in the short-term, by a specialist IT course. Secondly to involve all teachers concerned in the assessment process for Key Stages. Assessment in Technology and in AT5 will take the form of Teacher Assessment and SATs. For Teacher Assessment to be successful it needs to be continuous throughout the learning process and measured against the Statements of Attainment. Maths, Science, PE or Art teachers who are delivering IT through their subject need to be aware of what they are assessing and given guidelines to ensure that that assessment will be standardised (across the school in the first instance but ultimately across the country). Evidence of achievement needs to be collected. This may take the form of the product of the exercise - a story or essay; an artifact or a photograph of a piece of work, tape-recorded interview etc. However this evidence may be adequate for the subject assessment, in IT there needs to be some evidence of the process - copies of early drafts perhaps annotated with alterations and the reasons for them. Schools will need to clarify the way in which this evidence will be collected and collated so that the spread of IT capability can be aggregated and shown under AT5 as well as within other subject areas. In addition an IT co-ordinator in a school where much of IT capability is taught in other subject areas needs to be able to identify where it would be most suitable to set SATs in IT.

The task of mapping IT onto other curriculum areas is a huge one and not the sort of task that needs to be undertaken by every teacher. The silliness of teachers and advisors all over the country inventing the same wheel is not something we should support but the scrimble-scramble way the National Curriculum is being implemented makes this almost inevitable.
However hope is on the horizon for those of you still avoiding the pile of documents and photo-copies in a carrier bag under the desk. At Lancaster University there is a project called Supporting Technology Across the Curriculum (STAC) based in the Psychology Department that has done a lot of work on identifying different ways of delivering IT and D & T across and through the curriculum. They have produced some good INSET materials and also some A1 posters which map IT Programmes of Study onto Programmes of Study for the core subjects. Further information on the project can be obtained by writing to STAC Project, Department of Psychology, Fylde College,Lancaster University, Lancaster, LA1 4YF.

Inner London ITCO, six TVEI IT Co-ordinators, have performed a similar exercise in mapping individual Statements of Attainment from English, Maths, Science, Design and Technology and Geography (from the final report) onto IT SoAs and then placing all these onto a matrix enabling teachers to gain an overall view of what is statutory. Each grid is photo-copiable within the institution and will allow schools to map their existing IT practice onto the statutory minimum. The planning grids are available both as a subject/subject text and number matrix and in number form for overall curriculum planning and tracking. In addition there are sample Task Sheets produced matching 2 or more SoAs from different subject areas. A complete set of blanks is available for schools wishing to use them and case studies of whole-school INSET at a residential weekend and for an INSET day. The document **IT Across the Curriculum - A Model for Management and Integration** can be obtained from Framework Press, St Leonard's House, Lancaster LA1 1NN at £29.50 plus £2.75 p+p.

Any teacher using materials from either of these documents will be making a start on the mammoth task that faces us all. The TGAT Report reminded us that promoting children's learning is the principle aim of schools and that assessment lies at the centre of this process. Assessment should be systematically incorporated into children's learning and not a bolt-on and should be the servant not the master of the curriculum. Teachers need to rely on their own professionalism when implementing the National Curriculum and to use what resources are available to free them for their major task - that of teaching their students.

Letters

The last issue carried a heart felt cry from Jake Loddington concerning the problems of labelling discs clearly.

Dear Jake

I too pondered for hours on the question of which way up to write the label on a 3.5" disk, until one day the light dawned. Write it both ways! Then you can read it with the disk in the box or as it is about to be inserted in the drive.

Did you realise that if you use a 'Berol Fineliner' or similar, it is possible to label the EDGE of the disk. This raises an even more tricky question.

Of course there are those untidy people who will put the disks in the box with the hub facing forward. They of course won't even realise that this profound problem exists. I am currently looking for a 0.1" marker pen in order to write the title both ways on the edge of the disk and booking an early visit to the optician for some bi-focals with X5 magnification.

Yours Ever Helpfully
John Williams.

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Making the most of the glossary in Word

Stephen Rochford

Word comes with every RM Network and I know that it is widely used because it is easy to get started with it. Getting the most from it is sometimes more difficult and I'd welcome comments from users, either explaining how they use it or ways they have found effective for teaching it. I'll start the ball rolling by describing the use of the glossary.

First, a possible source of confusion; although glossary and gallery may sound similar they are not the same. The glossary stores commonly used words or phrases, the gallery is used to store *styles* (the appearance of sections of work).

You probably know that if you highlight something and press the DEL key that it is deleted to the scrap (a temporary store, shown inside {} at the bottom of the screen) and that if you then press INS this is copied back to the document. The glossary extends this idea by allowing you to delete or copy items to permanently named stores. Why would you use this? Suppose you need to type a word frequently (or even whole sentences). What you do is type it once, highlight it and then click on Copy with the left mouse button. You will be asked for a name for the glossary entry; type something short and memorable and press Enter.

To use this all you do is click on Insert and then enter the name you chose. For example, I have used the word glossary quite a few times. To save typing it each time I have put it in the glossary as g; each time I want it I just choose Insert, then press g Enter and the word appears. There is actually a short cut; pressing F3 with the cursor on or next to a glossary name will type the corresponding text so I am actually typing g and pressing F3 to get glossary.

There are some pre-defined glossary entries. Choose Insert from the menu and, with the mouse pointer in the command field, press the right button. This gives you a list of the permanent entries. Page will show on screen as (page) but will print as the page number; useful in running heads. Footnote enters the footnote number, date and time enter the current date and time. Dateprint and timeprint enter their names in brackets on the screen but will give the date and time when the document is printed on the paper. Dateprint is very useful; I always put (dateprint) at the top of standard letters so that the date they show is the date when I print them.

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I also have some standard entries for my address at home and school and one called main which fills in the top part of a letter down as far as the Dear Sir and puts in the yours faithfully followed by my name. This means that typing main and pressing F3 types a large part of a short letter and is very useful. When you make a glossary entry you can make it include anything that can be highlighted so it can include margin settings if you highlight the division marker.

The glossary can also come into its own for drawing boxes. On a printer which can print the IBM character set (and that's most dot matrix printers but not older PostScript printers so there are no illustrations here!) there is a set of characters which can be joined together to do boxes. They are listed in the back of the Word manual and the Nimbus owner's guide but if neither of these is handy then you can just experiment.

Hold down the ALT key and type 218 on the numeric keypad. Let go of the ALT key. Now type ALT 196 three times. Finally type ALT 191. This draws the top of the box. Highlight it then choose copy from the menu. In reply to the question name this as top. Type top and press F3. The line will be retyped. In the same sort of way you can store the side and bottom. Obviously the box is likely to be the wrong size but this doesn't matter. Insert the top, move the cursor to the middle of it and press DEL. Immediately press INS and keep tapping it until the line is long enough.

There are also sets of characters that will draw double boxes and a mixture of double and single boxes. It takes a while to sort them all out but once they are in the glossary they are ready for use always.

Finally, don't forget to save the glossary when you finish. If you go to quit without saving you'll be reminded that it is not saved. By default Word will call your glossary NORMAL.GLY and this is automatically loaded when you start up. You can give it a different name by using Transfer Glossary Save and you can get rid of mistakes from your glossary by using Transfer Glossary Delete. (Another short cut; if you have given your document a name then clicking Quit with the right mouse button saves everything and quitsall in one go and doesn't ask any questions).

I hope this is of use to some people. Please write and let me know how you make use of Word's features.

The Norton Backup v1.0

Richard Naylor

It is often said that a computer user never really appreciates the need for proper backing up of data until he or she has irretrievably lost valuable data. Such avoidable accidents lead the user to examine ways in which data may be made more secure in the future.

Backing up data raises a number of questions:

1. How often should data be backed up?
2. What about storage space for the data - how many discs are needed?
3. How long will it take?
4. What data needs to be backed up?

The responses to these questions lead to a variety of approaches for different situations. In my own situation most of the data is on a network server with software on one hard disc and user data on another. This makes backing up relatively easy. Software is backed up from the hard disk only when changes to its contents are made, also it is available on the distribution disks. The user data is backed regularly by copying the contents of the hard disk to tape. Users who wish to take files off the system and save them for possible future use are given disks and made responsible for their own backing up.

Standalone systems present more of a problem because they are often being used by relatively unskilled users in a variety of situations requiring different approaches to backup. For example, our secretaries backup new and changed files as they go along by simply copying to a floppy. When the floppy is full they perform a full backup of all data files to floppies, save these disks and start a new backup cycle on a blank set of disks. Two sets of disks are used in rotation. In a second example a vice-principal has a pupil database used for timetabling. Whenever changes are made to the database all the datafiles and indexes have to be backed up to floppy. This is done at the end of the day whenever data has been changed. the total amount of data in this situation remains more or less constant.

Backup utilities vary in sophistication and ease of use and I have found myself using a variety of different programs to meet the different approaches I require. This has involved the use of DOS COPY, BACKUP and RESTORE, RMTREE, batch files and SYTOS tape software. The Norton Backup software, which I have just started to use, offers sufficient flexibility and ease of use to replace all of these alternatives.

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The Norton Backup is easily installed onto the hard disk and runs perfectly on all RM systems including the PC186 where SETPC is required. The use of a mouse increases the programs utility particularly in the files selection process. Installation includes a section in which you tell it what floppy drives your system has. This does not preclude the use of other devices such as cartridge drives because the device for backing up to can be specified as a path. In other words the program can work through DOS rather than directly with the hardware. This feature is very important for PC186 machines as the program is unable to recognise directly the floppy drives.

On running the program it loads up the default setup file and reads the directories of any hard disks attached. The main screen offers four options: Backup, Restore, Configure and Quit.

The Configure option allows the user to reconfigure the program in variety of ways. The Program Level allows the program to run with all features, a basic set or with set up files for automated use. Other options include setting up the operation of the mouse and video display, the type of floppy drives on the system and a series of system tests which allow you to get the best performance on your hardware.

On selecting the Backup option the specifications in the default set up file are applied and statistics regarding number of files selected for backup and estimated time are calculated.

Files are selected for backup by first specifying the drive to backup from and then selecting the files themselves. This is done by moving up and down the displayed directory tree. Whole directories or individual files may be selected and selected files and directories are flagged. It is also possible to construct lists of file specifications for both inclusion and/or exclusion during the backup.

The destination of the files can either be a drive as determined by the configuration (eg A: or B: or A: and B:) or it can be DOS path. The latter destination would be used for a cartridge drive or across the network.

Three backup types are offered: full, incremental and differential. Incremental backup is used to keep copies of changed files for example when a file is changed each day this would backup each day's copy. Differential backup again backs up only those files which have changed but would be used when only the latest versions of changed files are required. Options are available for setting the archive flag on backing up.

These facilities should cover most types of backup situation.
A number of options can be selected which affect the way the backup is carried out. Different types of data compression can be selected according to whether disk space or speed is the priority. A full backup cycle can be enabled which will carry out a full backup followed by a series of incremental backups for a set number of days when the cycle is repeated. The user may choose between DOS format for destination floppies or Norton's format for speed and disks can be formatted/ reformatted automatically during backup.

Perhaps one of the most useful features of the program is the ability to save a particular set up in a file. This makes it easy to backup different types of data in different ways. Coupled with the macros facility this provides a versatile means of automating backup processes particularly for naive users.

When backup is initiated the progress of file copying is displayed on the screen. The speed of operation is particularly noticeable as is the amount of compression of data files.

The Restore option provides a similar versatility in its operation. Files can be restored to their original directories or any other directory. Again the speed is impressive.

I now have a program which should enable me to set up reliable backup procedures for a number of important school situations. Having all the required features in one program it will be much easier to adapt to the changing needs of some of my users.

A one off task for which the program would be useful would be the upgrading of an RM Net 2.2 server to version 3. The manager is required to save all required user files and any software not conveniently available on master disks. Such a program would enable the quick and easy selection of the directories required for backup and would make the tidying up of a network during upgrade an easy process.

Norton Backup seems to be an ideal companion to the Cumana cartridge drives making good use of the speed and capacity of these systems when compared to floppies.

The Norton Backup is available from Edhitec of Harrogate at £94.95 plus VAT.

CHAIN 64 NETWORK
A MENU SYSTEM & SCREEN PROTECTION

Ian Lee
(Head of IT, Didcot Girls' School)

ACCESS is a very easy to use menu system, it comes as part of a very low-cost utility package from SPA and I have developed a screen protection utility to go with it.

When I switch on my network at the master switch, I wait for the operating system to load into the server then I press N on one of the network stations - nothing new. Instead of the very unfriendly operating system message, the following menu then appears on the station screen, something like:

DGS NETWORK USERS' MENU
==========
PUPILS/SUBJECTS
STAFF/ADMIN
ADULT EDUCATION
NETWORK MANAGEMENT
RUN NETWORK MENU

Using the space bar or cursor keys I highlight the last option and press return, with the result that this menu is booted into all stations (this uses RM's RUN.COM utility). And that's it really!! Having selected this option I head for the door, the whole operation having taken perhaps one minute. By the time I leave the room all screens will be displaying the users' menu and be ready for action.

I have set all but the first option on the menu to be password protected and each option is set to automatically default to its own disk partition or user area for work files without the user needing to know anything about it. The first option gives a menu of subject areas on the curriculum, each leading to a menu of relevant programs for that subject or sub-menus for word processing, data handling, etc. It is easy to place a program on more than one menu and new programs can easily be added as they are purchased. I find that a menu for each department advertises what is available far better than a written catalogue, teachers or pupils are more likely to have a go at the programs and see what they are like, and they have instant access to all the programs they are ever likely to need.

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When a program is ended, ACCESS returns you to the previous menu. The little bit of resident memory that ACCESS normally occupies can be retrieved those newer programs that use every bit of memory by inclusion of a FULLTPA command in their menus - the only loss is that ACCESS will then reload with the start-up menu on exiting the program, rather than remembering the previous menu. All this without the user ever having to see the operating system. The problems with loading a program from the CP/M are: do you need to type BASIC first? Have you typed the name of the program correctly? Are you on the right drive or user area? What drive or user area are the work files to be saved on? Teachers don't want to be bothered with all this and who can blame them. Not to mention that friendly resident hacker who has some how managed to get hold of a manual and learnt how to delete all the files. ACCESS solves all these problems for you.

I strongly recommend ACCESS to all Chain 64 users, it is very easy to use and it comes with a slim instruction manual that is not only brief but very clear and precise too. I have found that ACCESS does everything that I have wanted it to do and since setting it up I have rarely needed to refer to the manual as the on-screen instructions are very good. Setting up the menus initially took quite a long time but the results were very rewarding and it has been easy to adapt the menus now and again to suit changing circumstances.

```
**********************
*   SCREEN PROTECTION  *
*     Press any key for *
*     the Network Menu  *
**********************
```

If, like I do, you always leave your network switched on all day, you probably now have the four or so lines of start up messages or a possibly a menu permanently marked on your screen. It is not a good idea to keep switching the monitor on and off during the day as this is when most wear and tear on the circuits occurs. You could keep the brightness control turned down - but somehow it always gets turned up again.

When I was visiting various companies recently (looking for a proper job), I kept seeing "things" bobbing about on the computer screens. "I think it's caught a virus", I'd say. "No, that's just screen protection, it comes on after a few minutes if nobody is using the computer", was the patient reply. What a great idea, I thought. Why haven't I got one? Why didn't Research Machines or the writer of ACCESS think of it? I finally put my brain into gear and thought about solving this problem for myself.

The result: after two minutes of non-use on any menu at any time during the day, my screen protection program is loaded automatically. This prints a moving message on the screen (see above) and any user that comes within range is prompted to press any key; which finishes the program and automatically reloads the users' menu again.

The easy part was writing a simple little program in BASIC to place a message on the screen and move it around every so often; which would terminate at the press of a key:

```
5  REM  "SCRPROT"
10 X=-18:Y=-4:ON ERROR GOTO 120
20 TEXT:PUT 12
30 X=X+18:IF X>18 THEN X=0
40 Y=Y+4:IF Y>18 THEN Y=0
50 PRINT TAB(X)"* * * * * * * * * * *"
60  PRINT  TAB(X)"*  SCREEN  PROTECTION  *"
70  PRINT  TAB(X)"*  Press  any  key  for  *"
80  PRINT  TAB(X)"*  the  Network  Menu   *"
90  PRINT TAB(X)"* * * * * * * * * * *"
100 FOR N=0 TO Y:PRINT:NEXT N
110 G=GET(2000):IF G=0 THEN GOTO 20
120 END
```

The rest depended on the clever abilities of ACCESS. After finishing a program, ACCESS always returns automatically from the current menu through to the first menu if the keyboard is left idle for 2 minutes. A quick dive into the manual told me another relevant point: a menu can be made to load one program/menu after another in a chain or repeated loop, and remain unseen by the user.

The first two menus must be set up as follows:

1st Menu: START

```
M MENU A:START2
M MENU A:USERMENU.MNU
```

2nd Menu: START2

```
M CHAIN
P A:BASICM A:SCRPROT.BAS
M REPEAT
```

Current users of ACCESS will be able to understand the exact terminology of these menus, but basically what happens is ACCESS runs the first menu, which must be called START. This will automatically run the only item listed, the START2 menu.

With the chosen software running scanning is quick and simple. When the instruction to scan has been given the scanning light comes on in the scanner. The scanner has a window through which the scanned area can be viewed. A button on the left hand side of the scanner is pressed and the scanner dragged slowly over the area to be scanned. When complete the space bar is pressed. The image appears in real time and can then be saved in whole or in part in TIFF, PCX or MSP file formats. During scanning a green light is lit on the scanner. The light flickers as a warning when scanning speed nears the maximum and switches of if the speed is to fast.

The simplicity and speed of operation mean that one can have several goes at getting a good image. Images themselves are generally surprisingly good and one usually repeats a scan in order to improve alignment.

I have mainly used the Windows scanning utility which is simple to use and fits in well with other Windows applications. It permits the user to select part of the image to be saved. Paintshow Plus runs from the DOS command line and is a fairly standard painting program. It is useful for touching up some of the scanned images using the pixel editing feature. Another particularly useful feature is the facility for scanning a large image such as an A4 page in several passes. This, however, does require some practice at getting the alignment set up. The image rotation facility increases flexibility for scanning broad images. I expect a Windows package such as Corel Draw would be much more useful for enhancing scanned images but Paintshow Plus is good starting point.

Documentation is good and consists of separate User's Manuals for the scanner and Paintshow Plus.

A useful optional extra at £135 is software for Optical Character Reading. I have not tested this but is claimed to be upto 99% accurate and cover a wide range of font styles and sizes.

Scanman Plus is very good value for money for those who do not wish to lash out on an A4 scanner at around £1500. While its chief limitation is size of image that can be scanned for most applications this is not usually a problem.

The package is available from a number of outlets including Matrix North and Edhitec. The AT compatible version is slightly cheaper than the MCA version described here.

Why the contents of START2 cannot be the START menu I just don't know, but the repeat action won't work if you do it. The menu START2, without showing itself, then runs the first item automatically - the USERSMENU shown at the start of this article - from which access to all the available programs is achieved. Now, when this or any other menu is left on the screen for 2 minutes then control is returned to the START2 menu which then automatically loads the next item in the list - my screen protection program SCRPROT.BAS. When this program is terminated by pressing any key, control returns to the START2 menu, which then repeats itself and loads the USERSMENU again. All this is remarkably quick and invisible to the user. The loading of BASIC slows things down a bit but this is only happening anyway because no-one is using the computer.

HELP!!
Could anyone compile this screen protection program for me into a .COM file?

Using RUN.COM to load a program or ACCESS itself into all stations, appears to send the string "GO" to all stations which jams up their keyboard buffer. When a BASIC program is then run, any INPUT statement will immediately receive this string and the program will run on, without waiting for a real keyboard entry. Also, any GET() statements are completely ignored and bipassed. It's a simple ...*FX21,0 command on the BBC, does anyone know how to clear the keyboard buffer on a 480Z?
(Yes! A line like

```
105 G=GET(0):IF G<>0 THEN 105
```

should do the trick.)

Does anyone know of a mail program for Chain 64 that enables printing of the messages? I should imagine that it would be quite easy to adapt MAIL.COM to include this facility.

Ring: Ian Lee 0367 240938 (home) 0235 812092 (school-leave message)

Screen burn in is a problem when computers are left showing the same thing all the time; does any one know if I should be worried about getting the Network sign on screen burned onto my Nimbus monitors?
The protection program should be easy to compile if anyone is using SPA's INTBAS package (and you could also do flash graphics like the Macintosh screen savers if you have the advanced graphics package.)
Any offers of help would be greatly appreciated.

LOGITECH SCANMAN PLUS

Richard Naylor

When setting up a system for desk top publishing I suppose many would consider a scanner a low priority when compared to the need for a good quality printer such as a laser printer. However, when all the hardware and software is up and running the quality of output immediately encourages all sorts of suggestions for applications. In school we have turned our hand to producing many booklets and programme leaflets which originally went out to printers but we have still had to rely on cut and paste for inserting college crests and line art illustrations before final photocopying. At this final stage of producing a document we have been unable to harness the power of the computer in dealing with images.

After reading the computer press I decided to purchase a hand held scanner as a cheap way of getting pictures from print onto the computer. This seemed to be an effective way of spending some money we won in a competition and at the very least would give me another input device to show my IT classes. The choice of scanner was limited by the need to fit it into a PC286. In other words it needed to be PS2 compatible. The only one available at the time was the Logitech Scanman Plus at about £170+vat.

Installation involved fitting a circuit board, running the PC286 reference disc to install the board and then installing the software. All very simple indeed.

The scanner allows scanning of a window 4.1 inches wide and upto 14 inches long depending on resolution. There are four scanning resolutions from 100 to 400 dpi. The scanner will also deal with colour and grey scale pictures as well as black and white line art.

With the scanner come three pieces of software for scanning in different environments. WSCAN is a Windows utility for scanning in the WINDOWS environment, DOSCAN does the same in MSDOS and Paintshow Plus is a general purpose painting package with scanning facilities incorporated which allows images to be enhanced in various ways.

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Prices Education July 1990

PC186

Memory

R5	512 Kb Memory Board upgrade	£85.95
R10	1024 Kb Memory Board upgrade	£149.95
NetPackR5	16 x R5 Memory Boards	£1295.00
SUPANET	8 x R10 + CACHE186	£1175.00
CHIP1	512 Kb Memory upgrade set 16 DRAM	£74.25
CHIP4	512 Kb Memory upgrade set 4 x DRAM	£74.25
CACHPAK	R10 Memory Board + CACHE186	£199.95
SI1MB	1024 Kb Silicon Disk Board	£245.00
SI2MB	2048 Kb Silicon Disk Board	£395.00
SI4MB	4096 Kb Silicon Disk Board	£995.00

Disk Drives

Floppy

CSR200	5.25" 40 track 360 Kb external	£115.00
CSR400	5.25" 80/40 track switchable	£129.00
CSR354	3.5" 2nd 720 Kb external	£75.00

Winchester

CXM10	10 Mb Exchangeable Cartridge drive	£499.00
WS30	30 Mb Winchester drive	£465.00
WS60H	60 Mb 28 ms Winchester drive	£650.00
SCSI	Winchester Interface for PC186	£69.95
TERM	Terminator plug	£9.50
/2 opt	2nd external option for above	£20.00

Software

CACHE186	574 Kb Floppy & Winchester disk cache	£75.00
NVD-III	Local Viewdata pkg	£95.00
NVD-IIINET	Local Viewdata pkg, Network versn	£195.00

480Z

Memory

480ZSI	256 Kb RAM upgrade Set 24 DRAM	£44.95
480ZSI32	256 Kb RAM upgrade Set 32 DRAM	£59.95

X-SERIES

Winchesters

WSX60U	2nd Internal 60 Mb Harddisk upgrade	£425.00
WSX100	100 Mb External Winchester incl I/F	£1495.00
WSX144	144 Mb External Winchester incl I/F	£1835.00
CXM10	10 Mb Exchangeable Cartridge drive	£499.00
PC2X	X-Series I/F for CXM10	£125.00
TERM	Terminator plug	£9.50

Software

IVD	Local Viewdata pkg for X & M Series	£125.00
IVDNET	Local Viewdata, network version	£295.00
CORDRW	Corel Draw v1.2	£275.00

LASER PRINTERS

LBP4	Canon Desktop laser (Inc Toner)	£925.00
PF1A4	250 sheet A4 paper feed for LBP4	£135.00
RAM1	1 Mb memory upgrade for LBP4	£325.00
SC1	Additional Scalable fonts card	£135.00
TONER4	Replacement Toner and Drum unit	£59.95

CABLES

CABDTI	PC186 AUX to modem cable	£9.95
CABSER	PC186 Serial printer cable	£9.95
CABLPT0	PC186 Low cost printer port cable	£9.95
CABWIN	PC186 Internal – Ext. Harddisk adaptor	£25.00
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CABXLPT1	X Series parallel printer cable	£19.95

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CLEAN10	Head cleaning kit for CXM10	£34.95

MODEMS

LINNET12	Pace Linnet 1200, V21,V22,V23	£195.00
LINNET24	Pace Linnet 2400, V22bis+MNP4	£350.00

NB There is a handling charge of £10.00 to be added to all account orders for less than £50.00.
(This does not apply to CASH WITH ORDER orders)

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Public Domain Software and Shareware

Rod Smith

The advent of the CP/M operating system in the mid 1970's was really the beginning of true personal computing. It provided a 'standard' environment in which software could run. For the first time it became possible to 'swap' software between different computers, providing they were both running CP/M. A group of computer hobbyists and enthusiasts, headed by Tony Gold from New York took advantage of this and began collecting together on disc those programs which they had written and wanted to share with others. Eight discs were filled immediately and many more followed. This was the beginning of Public Domain Software and these same discs are still available today in our US National Volumes. Since those early days many other libraries sprung up for CP/M. By the early 80's the IBM PC was gathering a large following and libraries for this machine were quickly growing. Also around this time the fist 'User Supported' or 'shareware' program appeared. Andrew Flugelman, the author of PC Talk, a communications program, had the idea to include wiht his program a message requesting a payment from yusers. This worked well and other authors soon followed suit with their own variations of this 'try before you buy' theme. This had huge advantages for the user in that he could try out lots of software at low cost and for the author in that by using the Public Domain Network of user groups, libraries and bulletin board systems he could get his product distributed free.

The Pros and Cons of PD and shareware

In the USA certain data and software produced by government departments and publicly funded projects in colleges, universities and similar organisations have the legal status of 'public domain'. In other words they become public property and may be used freely by anyone wishing to do so. Unfortunately in the UK, with our long tradition of government secrecy on even the most mundane matters, we have no such legal requirement to make available material which might benefit others. Of course this does not exclude individual authors from dedicating their work to the public domain, and many have done so. Public domain software covers the gamut of computing from very minor utilities and demonstration programs to very sophisticated and complex applications. The advantages of PD are that very often the source code for the program as well as the runnable version is provided and that, apart from any copying fee you may pay for the disc, no other payment is required.

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The disadvantages are that the quality is very variable ranging from 'bug ridden' to superb and there is no technical support unless the author deigns to give it. Some examples of good PD are *Kermit* the well known comms program, *Nethack* which is a huge and intricate D&D type adventure game and *Eedraw* a very good printed circuit design program.

SHAREWARE is a sort of commercial type of PD. As with normal retail software full copyright is retained by the author or his appointed agents, but unlike retail software, within certain limits, passing on of copies is encouraged rather than forbidden. In most cases authors issue shareware programs on a 'try before you buy' basis. In other words, you can try out the program on your system with your data for a limited period. After this period you are expected to make a payment to the author. Often, on payment of this 'registration fee', the author will provide extras such as technical support, extra program features, a printed manual etc. This system of course relies heavily on the honesty and integrity of the user to pay for programs he continues to use after evaluation. Perhaps rather surprisingly, many authors are doing well from their shareware products and the range and quality from this quarter is on a power climb. If you have ever spent a few tens or even hundreds of pounds on a program only to find that it did not really suit your needs then you will immediately see one of the advantages of shareware. The registration fees for shareware are often less than for equivalent retail software. On the minus side the quality of shareware tends to be more variable than retail programs and you may have to check out several programs before you hit the jackpot. Another thing to bear in mind is that many shareware programs are from American authors and this can lead to problems with paying them and getting technical support.

Obtaining programs

As with most things, the old 'no free lunch' adage applies, and unless you are lucky enough to have a friend or colleague pass on a program to you, you will have to pay some sort of copying fee to obtain PD and shareware discs. There are many libraries who distribute PD and shareware discs for a nominal fee which is usually between two and five pounds. Unfortunately, like PD and shareware itself, the quality of service provided varies widely. This has been compounded by the fact that PD & shareware distribution easily lends itself to dilettantism or 'quick buck' opportunism rather than providing a providing a good service to customers and authors. Distribution of old, incomplete or non-working programs has given PD and shareware a bad name in some quarters.

This problem has been addressed by the Association of Shareware Professionals (ASP), an organisation set up by a group of professional shareware authors for the purpose of generally improving standards in the field. Participating authors and disc vendors agree to meet certain standards of quality and service which may be enforced by the association's ombudsman in cases of customer dissatisfaction.

PD and shareware is often alleged to be the dissemination agency for computer viruses. Whilst these things do exist, the fact of the matter is that reputable libraries are probably the most careful people on the planet when it comes to checking for these as, for them, a contamination would be a commercial disaster. Certainly the virus scare is mainly media hype and probably many so called virus problems are nothing but blinds for operator error! However, if you go collecting software downloaded from dubious bulletin board systems or collecting copies of discs from all and sundry, you may eventually run into one of these. If you are a bit of a 'software glutton' you would be well advised to obtain some of the various anti-virus software available from retail or shareware sources.

Advertisement

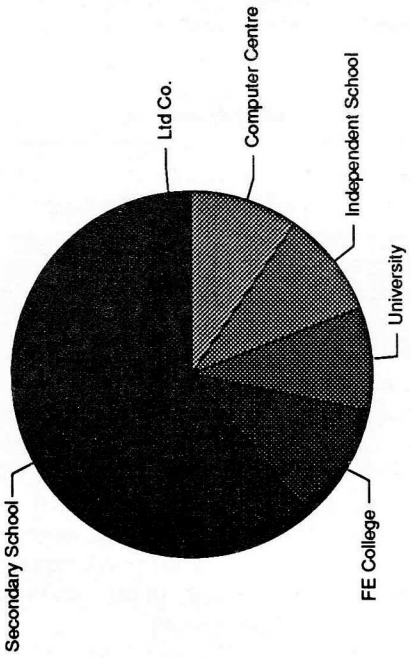
The Public Domain and Shareware Library is one of the longest established libraries in the UK. Since 1982 we have been supplying the best in PD and shareware to schools, colleges, government departments and companies as well as individual computer users. Our library currently contains more than 2000 discs of IBM PC programs and another 800 or so for CP/M. We specialise in technical, programming, source code and educational material, but we also cover the full range of normal applications such as spreadsheets, databases, word processors, project management etc. PD and shareware can offer equal, or better, software solutions for a fraction of the cost of conventional retail software. Prices start from £2.25 per disc and we can supply on 5.25" or 3.5" discs. Note that shareware programs do require an additional payment to the author if found useful. Send a self addressed envelope and two first class stamps to receive your free copy of our catalogue and reference guide to PD and shareware to:
PDSL, Winscombe House, Beacon Road, Crowborough, Sussex, TN6 1UL.
Telephone 0892 663298

Some membership information

Stephen Rochford - Membership Secretary

Many thanks to all of you who carefully fill in all the boxes on your membership forms. I carefully record the data in my dBASE file and the time has come to try and analyse it. The fields which are, perhaps, most interesting are those which record what you use your computers for and the kind of institution where you use them. The two charts below are created in Quattro and, I hope, are self explanatory. Secondary schools are still the main source of members but there are members elsewhere. There is a good spread of uses of computers, although programming is falling off. I have to own up to still writing programs when sometimes a package would be a better idea but I'm trying hard, hence the use of Quattro for the charts.

Breakdown of institution types in the User Group.



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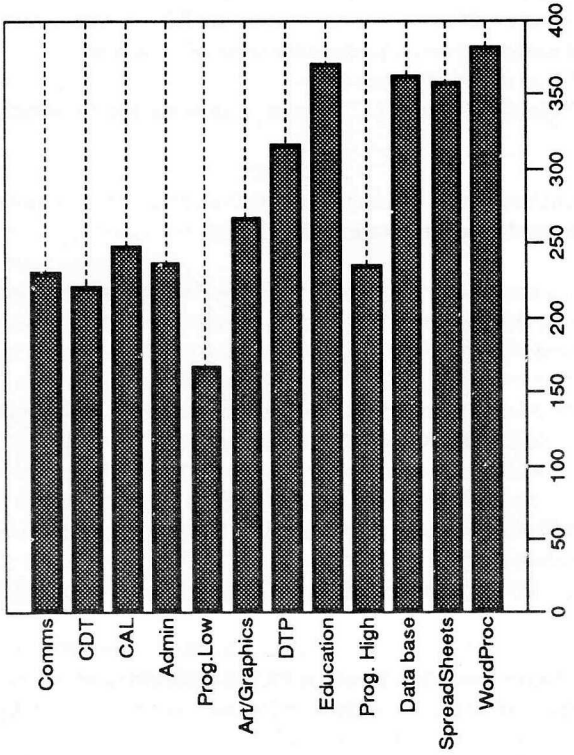
Uses made of the computers by User Group members.



I know, because I've read all your forms, that more of you are based in the South East than anywhere else in the country but I can't easily graph it. What I want to do is get a spreadsheet (either Excel or Quattro) to extract the letter(s) at the start of the postcode field and then count how many there are in a particular area. Does anyone know if this is possible? If so, please let me know. I'd also like to extract the data on the computers in use. When I first started recording it I expected to pick out the data by writing a program and this I did last year. This governed the way the data is stored; for example 12J1K3O represents 12 Networked PC186, 1 Net AX and 3 Net PC286. Slicing this string is easy in almost any high level language. How will I do it in Excel or do I need a separate field for each type of computer?

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Advertisements

For Sale:
Two RML 380Z-D; 56k; 40/80 Varitext option; 12" monochrome monitor, HRG board, double disc drive; with WordStar 2.2, dBASE II and other software and various manuals. Any sensible offer welcome.

TDS tablet Digitising System LC12 , complete with documentation. £75 ONO

Graphtec multifunction X-Y plotter MP1000 with additional pens, paper etc., complete with documentation £80 ONO.

The two peripherals have been used with the 380z but should be usable with a Nimbus; the software for them is mostly user written but is not too complicated.

Please contact: Mr J B Cavanagh, 51 Chestnut Road, West Norwood, London SE27 9EZ, Tel: 081 670 8861 after 7.00pm

Wanted:
CP/M 1.4 on 8" disc or same on a 3.5" disc (because it can then be Kermitted across)
Please contact: Mr M J Hamer, Redway, Ullingswick, Hereford, HR1 3JQ

For Sale:
Nimbus X10 10Mb hard disc Nimbus PC186 with extra memory, Piconet module, mouse, software (including Windows, Word, NewSPAper, PaintSPA etc.) Offers in the region of £775.
Please contact: Mr C Bake, 21 Svenskaby, Orton Wistow, Peterborough, PE2 0YZ.

Wanted:
480z disc drive, working or not!
Please contact: Tim Phillips on 0284 706623.
Tim has a large collection of n80Zs and parts; if you need anything try contacting him. He is also willing to act as a "clearing house" if you are trying to dispose of old 8 bit equipment.

For Sale:
Nimbus PC1, 320k memory, green screen monitor, Canon 80 column dot matrix printer, software including Word and Multiplan. Offers in the region of £600.

Please contact: Dr Ian Talbot, 34 Belitha Villas, Islington, London. N1 1PD Tel: 071 601 7915 (work) or 071 607 1470 (home, after 6.00pm)

Wanted:
480z disc drive.
Please contact: Mr Minchine, Cotteridge J/I School, Breedon Road, Cotteridge, Birmingham. B30 2HT
Tel: 021 458 2865

For Sale:
PC1 1Mb with 102 key keyboard.
Please contact: Bob Jeffrey, 68 Manor Avenue, London SE4 1TE.

Wanted:
A copy of the RML 480z User Guide, PN 11901 and the Extended Basic version 5&6 for disc systems manual.
Please contact: E Brown, 4 Dianne Road, Thornton Cleveleys, Blackpool, Lancashire. FY5 4EF

For Sale:
380z 56k, twin double density drives, HRG board, mono and colour monitors.
480z L5 (i.e. 256k memory and HRG) with twin quad density drives and colour monitor.
CP/M for both and software including WordStar, Multiplan, dBASE II, ZASM, ProPascal and various sundry software. All equipment is boxed in original packaging. Buyer to collect or arrange carriage. £250 inclusive or make a reasonable offer; the only condition is that the software is not for sale without the hardware.
Please contact: Sarah or Peter Bishop, 23 Larkfield Road, Richmond, Surrey. TW9 2PG. Tel: 081 948 4382.

For Sale:
Nimbus PC186 PC1 with 1Mb RAM and colour monitor, fitted with firmware 1.32F. Standard manuals and Microsoft Windows. Four years domestic use only. £400 plus delivery.
Please contact: Brian McHugh, 28 Siskin Close, Bishops Waltham, Hampshire SO3 1RQ Tel: 0489 896658 (evenings only)

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A4 Computers for Schools

Richard Naylor

IT is now a major cross-curricular theme in the National Curriculum. Schools are demanding much more hardware and software resources to meet the needs all departments in the school rather than just those who, upto now, have shown an interest. I would strongly suggest that IT is as important in a pupil's experience as books, pens and pencils. If this is accepted then current computer based systems while having an important place are somewhat limited; limited by the fact that they are not immediately available in sufficient numbers for spontaneous class use. If IT is to become second nature to our pupils then IT systems need to be as available to them as books, pens and pencils.

I suggest that this availability can only be met by every pupil having an A4 size portable computer in their school bags. Before everybody throws up their hands in horror at the potential cost and logistical problems of such an idea I would to propose that we debate the portable and practicalities of the proposal in the columns of this and other journals. As we know only to well technology advances very quickly in this area so that by the time we have specified and designed such a system cost may not be too prohibitive.

Current systems going into schools would handle the large memory hungry packages such as DTP and CAD as well as subject specific CAL. Networks would also provide mass storage for pupils' work and links to the A4 portable systems. Teachers would prepare work on these systems for downloading to pupils' machines. In turn pupils would download work onto the network for assessment by their teachers. Computer labs and departmental systems would still be required.

So, to start the ball rolling I suggest the following brief specification of portable machine for pupil use.

A4 Pupil Computer:
A4 size of rugged construction!
QWERTY keyboard
EGA flat screen display with at least 80char by 25lines
Solid state discs - battery backed RAM disks - no moving parts - removable?
Parallel printer interface
Serial interface for downloading data to/from PC machines.
Bus interface for specialist add-ons?

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ROM software:
Operating system (DOS based - is compatibility really necessary?)
Built-in integrated software - spreadsheet, database, graphics, wordprocessor, calculator, communications (with PC), diary. (Microsoft WORKS?)

Removable battery packs which could be recharged either in the machine or externally.

Such a system could cover the day to day requirements of the National Curriculum. Computer networks in labs would permit the use, storage and manipulation of pupil data in more extensive packages such as DTP. Classrooms and labs would require printer points and battery recharging points would be required at school and home.

Some questions to be debated:
1) Is it necessary/desirable for every pupil to have a computer on their desk?
2) What should the specification of such a system be?
3) What are the logistical problems in dealing with such things as recharging batteries, printing, breakages?
4) What are the long terms cost implications?

There is also a need for research into the use of portable machines by pupils. The Department of Education in Northern Ireland is to sponsor such research and a number of projects are underway in GB.

What do you think? Is the whole idea potty or does it represent the way IT is going in schools? Write to the magazine and tell us your views.

A number of schools have bought large numbers of Z88s so that a class of pupils can each have one. Others have given a portable computer to each member of staff. I would welcome comments from anyone with information or opinions on the subject. My own preference would be for something as similar to a Nimbus as possible; at least it should be able to run Word or Write. Write and let me know!

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Writing for the magazine

This magazine is made up of what you send me plus bits and pieces of news which I find. If you don't like what you see then write and let me know and, if you can, write something for me to print. This issue has an an article on transferring to using Nimbus computers from BBC computers in a school; I know that many of you are in the same position. Why not write and let me know how you got on? I'm quite happy to publish gripes as well as praise because it may well be that your gripe will be picked up by someone who has had the same problem and found out how to solve it.

Graham Townsend has written a short article asking for comments on what you do with the network bundle. In his travels with the server he meets people doing all sorts of things. Why not write and let us know? You may think you use the software in the "standard" way but it's probably not the same as everyone else.

If you are writing for me then the ideal is to send a disc produced using Microsoft Word. This magazine is cobbled together with the aid of a style sheet in PageMaker and I find that I can cope with almost any character format so just set it out tidily and I'll do the rest. If you use a word processor other than Word then that's also fine. I can read WordStar and Oxfordshire Write from 480z or Nimbus and Windows Write or Word for Windows.

If you just want to air your views then do send them along; provocative comments are always welcome and if you've got anything slightly less serious then I'm quite happy to fill up an odd corner like that as well.

In short, get those fingers tapping. Remember, we pay £5 per printed page for articles (although all payments are at the Editor's discretion)

Finally, I've given up experimenting with the cover design! Art was never my strong subject but I'd like something more interesting than the cover this time. If you are good at design then please send something in. If I use it then you will get a year's subscription to a magazine with a cover which you have designed!

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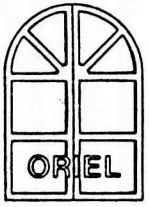
LET YOUR MOUSE DO THE SEARCHING - Information Handling in a Windows Environment



What is Oriel?

Oriel consists of an advanced Information Handling (database) system together with a set of graphic display utilities

Is Oriel easy to use?

Oriel is both sophisticated and accessible. Using an English-like interrogation language you will find, in particular, the process of questioning data very simple.

At the touch of a few buttons you can browse freely through the data, ask both simple and complex questions, move data from one part of Oriel to another and simultaneously undertake a number of different tasks.

What other facilities does Oriel offer?

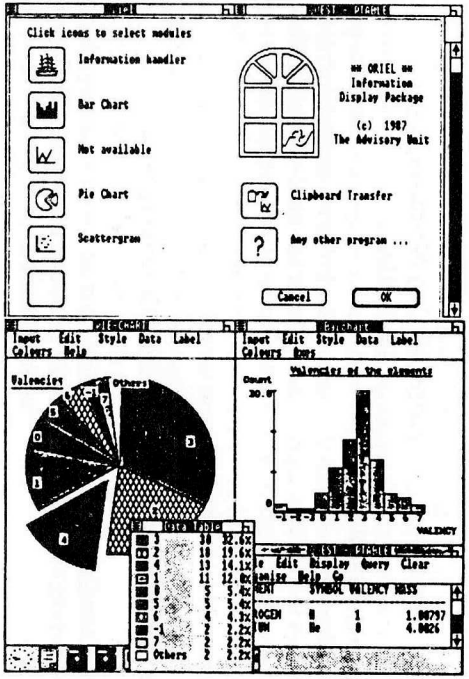
Oriel enables you to display data in, for example, pie-charts, bar-charts, line graphs and scattergrams.

Oriel can also be used to handle information created from another software package. You may wish, for example, to display data from a spreadsheet in Oriel's pie-chart.

Can I use QUEST data with Oriel?

Oriel is designed to run under Microsoft Windows. The package will run on any micro capable of operating MS Windows that has a memory of 640K.

To order **Oriel** or for further information, contact:



The Advisory Unit for Microtechnology in Education, Endymion Road, Hatfield, Herts AL10 8AU. Tel: (0702) 654443

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From BBC to Nimbus

J B Buckley

Using the BBCBasic Emulator on the Nimbus is an attractive proposition. One then has access to the vast stock of utilities and educational software written in BBC Basic, just waiting to be run on the Nimbus. However, it takes an optimistic frame of mind to even suspect that this is a straight forward task. Rather I would put it in the same category as using printers. Not a pleasant experience!

Our school network uses Nimbus PCs running Net 2.2.

The User Guide is very well presented and with a cursory glance everything seems familiar to the seasoned Acorn user. However, on closer examination the differences become quite formidable.

The school is using two commercially converted pieces of Educational software: the Key database and Grasshopper.
Key is more convenient on the Nimbus, there is no disc swapping and using a hard disc, the access times are much reduced. The most serious problem is that of printing over the Network. There is no icon to show that the screen is being dumped and the picture is not printed out until the user leaves the program. Both these quirks cause problems: for example leaving the program before the screen is fully dumped. The user must wait patiently and then quit when the menu reappears.

A final problem seemed to be a result of the pupils working from drive A rather than reading/writing to the hard disc; this caused a number of floppy discs to be corrupted. I suspected this was due to them taking the disc out at an inappropriate time.

Grasshopper has not caused any problems.

Another avenue for the user is to convert Acorn BBC Basic programs to Nimbus BBC Basic. This will only work with programs written in Basic.

Now this is a substantial task and not to be recommended to anyone short of time or expertise.

Obstacle number one is the fact that Acorn BBCBasic programs are usually on 5.25" discs; more recent machines such as the Nimbus PC will use the 3.5" format. This problem is best solved with twin disc drives, one of each format.

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Obstacle number two is the fact that the two machines use different filing systems and operating systems. I have overcome this one using the Master 512. Its DOS+ operating system allows the copying of files from BBC format to MS DOS format. There are two relatively straight forward to use utilities on the !boot disc called PUTFILE and GETFILE. There is another one called MOVE with the latest operating system.

(Another possibility is to use the program XFERBBC and the BBC Disc Transfer Kit from RM; this allows a standard BBC drive to be connected to a Nimbus so that programs can be moved).

Obstacle three is the fact that the two machines store the languages in different ways. The Acorn version needs converting with FILECONV supplied with the Nimbus kit. An added problem here is that your files should have an extension BBC for the utility to recognise them.

Obstacle number four is a constant niggle. The incompatible filing systems use different syntax. The emulator uses MS Dos syntax. The command *Dr.0 (ADFS commands such as *MOUNT are not understood) becomes *DR.A:. Not only must instructions within a program be changed but the different syntax must be used when typing in commands. An extra BBC Basic(86) command may come in useful, *DOSRETURN; insert this early in a program and the computer avoids the "press any key to return to BBC Basic" hurdle when it encounters an unidentified command that it thinks is a filing system command.

Obstacle number five is the printing out of a hardcopy over the network. As has already been mentioned the file is not sent until the program finishes or the user presses control/alt/prtSc. As a result, the VDU 2 command does not have any immediate effect. In RM BBCBasic there is an extra series of commands called *OPT(number). This determines whether output goes to the screen or some other output device such as the printer. This is useful but unfortunately it bypasses the VDU driver so any VDU1 commands to send printer codes will be ignored.

My latest method of enabling immediate output is for the program to END, allowing the user to press Ctrl/Alt/Prt Sc; then pressing a preprogrammed function key to continue.
(You can use a DOS call to close the spool file; put this:

```
DIM despool 10:P%=despool:[:OPT 2:MOV AX,&5D09:MOV
BX,4:INT &21:RETF:]
```

in a line near the start of the program and then simply put

```
CALL despool
```

at the point (or points) at which you want the printout to appear.)

Obstacle number six is more serious. The writers of BBC Basic(86) seemed to have followed a slightly different programming philosophy to the team that created the original Acorn Basic.
It concerns procedures and, as was pointed out in the April 90 edition of RM User, causes converted programs to fail. The main reason seems to be that only one ENDPROC is allowed within a procedure in BBCBasic(86). Programmers in Acorn Basic find it a convenient way of jumping out of a Procedure when a condition is met. For BBCBasic (86) the program must be rewritten with a GOTO(line of the ENDPROC). Here is an example.

```
10 PROCexample(x$)
20:
30DEFPROCexample(x$)
40IF  x$="Y"  THEN  ENDPROC  ELSE  PRINT  "NO!"
50ENDPROC
```

This will confuse BBCBasic(86) and will generate an error at some apparently unrelated place in the program.

It must be rewritten:

```
10PROCexample(x$)
20:
30DEFPROCexample(x$)
40IF  x$="Y"  THEN  GOTO  50   ELSE  PRINT  "NO!"
50ENDPROC
```

Loops are a minor problem because if they have been used for timing purposes they will run too quickly. Recursion, calling a procedure or function from within itself seems to work all right. Random access files seem to work without problem.

In conclusion, there has not been one program to date that I have been able to use without modification. Even the most straight forward of programs seems to cause problems: a mode 7 program used sideways scrolling, an effect not supported according to the manual. It worked but with a severe flicker. Fortunately no print outs were required, that would have been the end!

(Please remember that if you have bought a program for use on a BBC then you are infringing copyright if you copy it onto a Nimbus; the only programs you can legally copy are your own work. If the program you want is only available on a BBC but you think it would work on a Nimbus then write to the supplier and ask them to provide it in Nimbus form.)

The Network Bundle

Graham Townsend

I am often asked, as I go around the country, "What programs can I use in subject X ?" The advent of the National Curriculum and an increased requirement for IT across the whole of the curriculum has led to many network managers being asked the deceptively simple question, "what software have you got .....?" Once the software is purchased we are then asked "How do I use the program" etc. The other problem is of course is that there is never enough money to buy hardware and software! We are lucky that RM give us a software bundle, which allows us to get all departments started.

We must also realise that users have all got different levels of expertise and that we all feed off other people's ideas. I would like to ask, therefore, that a section of the magazine is used to write short articles on how the network bundle is used in various subject areas.

I have been told that this request will not receive a single letter to the editor, but I cannot believe that every user is not able to write a couple or paragraphs - or to initiate one being written by a colleague or student. Surely such letters regularly appearing will save us a lot of time in the future and more than repay the short period taken in producing the letter. Who knows it could even result in the exchange of worksheets etc. -That could save a little time, so come along, prove the doubters wrong and let us jointly introduce a new section to the Magazine.

Netsoft

The Netsoft Software server is available to all users who wish to see the software installed on it. There are at the time of writing over 100 companies with nearly 200Mb of software installed.
Why not organise your own regional meeting and have the server available?
The Techpaks and support packs from RM are also available from the server. They are of course unsupported by RM.
Contact Graham Townsend (081 572 1936 work or 03372 66043 home) for further details.

'A' Level Computing Textbooks

Terry Brown

It's the beginning of another year and I'm tackling the usual August tasks. One of these is ordering textbooks.

I have mixed feelings about textbooks for 'A' Level Computing. Yes, they do make life easier, but I'd much prefer to spend the money on hardware or software. I've never discovered an adequate and comprehensive textbook and those that are available date very quickly.

So, of course, the answer is to write your own. I've just read of the trials and tribulations of Tony Elton ("Teachers' Weekly", 28 June 1990) in trying to get his French textbook published and I'm not desperately keen to follow his example. Moreover I'm not sure that either I would produce anything better or that would also not date so quickly.

Do we really need these textbooks?

I know that I've got some super notes (modesty) on topics X,Y and Z and I feel sure that out there amongst the readership of RM User are my colleagues with the complementary notes on topics A,B and C. And certainly all of these notes are word processed on Nimbus Word.

So hence my proposal. Basically a regualr exchange by disc of word processed notes on 'A' Level Computing topics via some clearing house (and I'm offering my services for this). Hopefully the catalogue of topics would expand to cover most parts of the syllabii and, more importantly, contributors would feel keen to update their contributions on a regular basis. I'm sure that there are problems but it seeems a worthwhile venture to break away from the tyrrany of expensive, out of date texts.

So drop me a line either giving some details of what you might want to contribute or your ideas of how such a scheme might work.

If you are interested in this very worthwhile idea then contact Terry at:

Work: Wyggeston Collegiate
Regents Road
Leicester
LE1 7LW
Tel: 0533 554629

Home: Peartree Cottage
Saltby
Melton Mowbray
Leicestershire
Tel: 0476 860335

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Membership Form

Please use capitals

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I enclose a cheque payable to RMUG ☐ order ☐ for £15 (£20 overseas members). If you are not enclosing a cheque then please enclose an official order, indicating clearly to whom the invoice should be sent.

In order to serve our members better we like to know something about them and what they use their computers to do. The information is confidential and we are registered as Data Users under the Data Protection Act.

Please fill in a number next to the computer names below; the first box is for standalone computers, the second, if present, is for networked machines.

380z ☐	480z ☐☐	Nimbus PC186 ☐☐	Nimbus PC286 ☐☐
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Please tick the areas in which you are interested.

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Please send your form to: **Stephen Rochford, RMUG Membership Secretary, George Stephenson Community High School, Southgate, Killingworth, NE12 0SA**

You may photocopy this form if you do not want to cut your magazine.

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Similar systems are available for AX and VX models. Telephone us for details.

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